

Exercise	1	2	Total
100%	5	-	5
Points			

**Name:**  
**Stellar Astrophysics**  
 Homework - Lecture 16 - The Sun  
**Due date: November 3rd**

## 1 Mass loss of the Sun

1. At what rate is the Sun's mass decreasing due to nuclear reactions? Express your answer in solar masses per year.
2. Compare your answer to part (1) with the mass loss rate due to the solar wind
3. Assuming that the solar wind mass loss rate remains constant, would either mass loss process significantly affect the total mass of the Sun over its entire main-sequence lifetime?

Look into Chapter 11 in Carroll & Ostlie in case you have problems with this exercise.

## 2 Short homework

You wonder why this homework is so short? Use the time you saved to

go and vote!